



Influence of Teacher-Learners' Classroom Interactions' Strategies on Learners' Learning Performance in Lower Primary. *Case of Endoglossic Country, Rwanda*

Marie Yvonne Ingabire¹, Ass. Prof. Gabriel Nizeyimana², Dr. Delphine Mukingambeho³, Dr. Michael Tusiime⁴

¹Department of Curriculum and Instructions at University of Rwanda/College of Education, Northern Province of Rwanda, E-mail: ingabiremarieyvonne@gmail.com.

ORCID link: <https://orcid.org/0009-0006-8712-7478>

²Department of Curriculum and Instructions at University of Rwanda/College of Education, Kigali city, Rwanda, E-mail: nizeyimanagabriel11@gmail.com

ORCID link: <https://orcid.org/0000-0002-6559-1249>

³Department of Curriculum and Instructions at the University of Rwanda/College of Education, Northern Province of Rwanda
E-mail: dmukingambeho@gmail.com

ORCID link: <https://orcid.org/0000-0003-0944-7362>

⁴Department of Curriculum and Instructions at University of Rwanda/College of Education, Kigali city, Rwanda, E-mail: krwibasira@yahoo.fr. ORCID link : <https://orcid.org/0000-0002-8650-6533>

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Abstract— The study intended to analyze the influence of strategies employed in teacher-learners' classroom interactions through English on learners' learning performance in the lower primary of Musanze District. It followed a sequential exploratory research design. Six primary schools were purposively selected for qualitative data gathering, and ninety-one schools were sampled for quantitative data collection. Qualitative data were collected by semi-structured interviews conducted with 12 teachers and 6 school head teachers, while quantitative data were obtained from the written questionnaire administered to 84 teachers in lower primary. The thematic analysis was employed to analyze qualitative information while quantitative data were treated using inferential statistical analysis by T-test and ANOVA. Findings from the study revealed that some strategies employed in teacher-learners' classroom interactions do not provide room of improving English language used as Medium of Instruction. Therefore, barriers in Medium of Instruction lead to misunderstanding or wrong interpretation of questions or other required tasks during school exercises, tests or examinations, that provoke low learners' learning performance mostly in public and government-aided schools compared to their fellows in private schools, with satisfactory proficiency in English. Then, a statistically significant difference was detected between learners' learning performance of learners in private versus their counterparts in public and government-aided schools. The study concluded that the language barrier handicaps effective teacher- learners' classroom interactions and learners' learning performance. Then, it recommended teachers and learners to adopt measures that improve their English proficiency as well as their interactions, to refine learners' understanding of subjects taught in English to boost learners' learning performance.

Keywords— Classroom interactions; Learning performance; Endoglossic country, Rwanda.



I. INTRODUCTION

Within this era of globalization, knowledge and skills in foreign languages are necessary and required to enable people of different countries to communicate and exchange experiences, knowledge and goods (Dash & Gandhi, 2022). In this regard, various countries strive to promote the English language, because of its role in international communication and cooperation (Reddy, et al., 2016). Along the same lines, Assan and Walker (2018) noted that the needs and requirements of having sufficient knowledge and skills in the English language in almost all sectors of life (education, business, communication, employment, tourism, entertainment etc.), dictated many countries to promote the use of English language in their population (Zahedpisheh, et al., 2017).

For the case of Rwanda, various strategies aiming at promoting that language have been set (Bagambe, et al., 2015). This was done within the views and ideology that do not consider Rwanda as an island, but prone to its international integration for better and sustainable development (Rizinde, et al., 2018). One of the strategies to reach this target was the improvement of English use at all levels of the education sector (Nshimiyimana & Bazimaziki, 2024). Therefore, the Rwandan government, and other stakeholders in education, invest in improving the teaching and learning of English, to enable Rwandans to cope effectively with life's requirements that demand sufficient knowledge of the English language (Kwibuka, 2013; Sibomana, 2014). In formal education, the English language was opted as the sole Medium of Instruction (MoI) in all levels of schooling in Rwanda since the 2009 school year. This decision was taken to nurture the knowledge and proficiency of teachers and learners in English and allow Rwandans to be competitive at English-speaking international communities (Karasenga & Nzanana, 2022). Moreover, as Ndabaga, et al. (2023) noted, teaching and learning through international language as MoI might cause challenges in endoglossic countries, if not well-planned and implemented. This is because, teachers and learners have to interact or communicate within a foreign language, not or rarely utilized in their daily life (Shamil, et al., 2022).

Teaching and learning through English as MoI is still a big challenge for Rwandan teachers and learners whose mother tongue is not English (Ndizeye&Tabaro,2023): Dushimumuremyi and Sibomana (2018) argued that even at higher educational institutions, English was required and employed to classrooms context or academic situations, while Kinyarwanda was mostly used in other ambiances of life. At the secondary level, Pearson (2014) affirmed that even teachers in both rural and urban secondary schools in

Rwanda did not have sufficient competencies in teaching through English language. At the primary level, Ndizeye (2022) mentioned that 85% of primary teachers were at the beginner, elementary or pre-intermediate level of English. Then, if teachers of such low levels of proficiency in English were required to deliver the lessons in English, it would undoubtedly affect the quality of the lesson content delivered. This implies that the teaching-learning process, specifically teacher-learners' interactions becomes very challenging when such teachers' low proficiency in MoI is coupled with learners grow in endoglossic ideology, and at early stages of schooling with less prior knowledge (Niyibizi, 2014). Therefore, some strategies like code-switching, memorization or cramming among others are adopted in the teaching-learning process to mitigate challenges related to language barriers (Ndabaga, et al., 2023). Meanwhile, as mentioned by, Demetriou, et al. (2019) the challenging self-representation of learnt content may result in the acquiring of insufficient knowledge, poor competencies, and low learning performance to learners.

Learners' learning performance is a complex issue that concerns all educational partakers including learners, teachers, parents, educational authorities and the whole society in general (Lamas,2015). Saeed and Mohamedali (2022) mentioned some of the factors that may constrain learners' learning performance, like challenged school working conditions, variables related to teachers' background (motivation, personality, qualification), learners' background, teaching-learning strategies, etc. In addition, Shahjahan, et al. (2021) identified gender, age, prior performance, socio-economic status of learners' families, learners' family supports in learning, etc among constituents influencing learners' performance. Furthermore, Husaini and Shukor(2022) argued that the living environment of learners (rural or urban, boarding or day schools), daily weather conditions and study hours, feeding and accommodation, cooperation and classroom interactions have a great influence on learners' learning performance. Finally, Ayuwanti and Siswoyo(2021) highlighted strategies employed during teacher-learners 'classroom interactions to have a great influence on learners' understanding of subject contents that condition learners 'learning performance.

Mwiseneza (2015) asserted that poor performance in MoI most possibly leads to poor performance in that language as well as other school subjects taught and learnt in it. Besides, Emmanuel, et al. (2020) affirmed that the level of teachers' and learners' skills in English used as MoI in Rwanda, influences learners' learning performance. Additionally, Kistner, et al (2015) asserted that employed teaching-learning strategies contributed to the nature of teaching-learning outcomes including learning

performance. Then, Pals, et al. (2018) argued that rote memorization of learnt content, one of the strategies used by many Rwandan learners to mitigate challenges related to the MoI, may affect negatively their long-term memory and cause poor performance in further intellectual tests.

Based on the mentioned statements on teacher-learners 'classroom interactions and learning performance, the researchers left the need to examine the influence of strategies utilized during teacher-learners' classroom interactions through English on learners' learning performance in the lower primary in Rwanda. Therefore, the purpose of this study was to investigate the influence strategies employed in teacher-learners' classroom interactions through English as MoI on learners' learning performance in lower primary schools of Rwanda. The study sought to answer the following research question: To what extent do teacher-learners' classroom interactions through English influence learners' learning performance at lower primary levels.

Moreover, regarding that learners' learning performance resulted from different factors; this study emphasized some strategies employed in teacher-learners' classroom interactions through English MoI and learners' learning performance in lower primary. This was very significant because Rwanda is an Endoglossic country where Kinyarwanda the mother tongue is mostly used. Then after shifting to English as MoI many teachers and learners adopted specific strategies to be able to interact. Those strategies are suspected to be among the key factors that determine the quality of teaching and learning outcomes. It was therefore expected that findings from this research could serve as a reference to future studies in this domain and guide decision-making aiming to improve the teaching and learning process in Rwanda.

II. LITERATURE REVIEW

Ntawiha, et al. (2020) noted that the quality of outputs in the educational system depends on the quality of inputs, and how effectively they are employed. Pritchett (2015) mentioned six elements namely knowledge, comprehension, application, analysis, synthesis and evaluation through which the quality of learning outcomes is manifested. According to Dong (2020), one of the techniques to evaluate teaching and learning outcomes is to test learners' learning performances. Therefore, to perform academically means gaining a minimum level of proficiency or having the intellectual capacity that leads to a satisfactory ability to accomplish successfully a given task (Okechukwu & Oboshi, 2021). For this purpose, Izci (2016), revealed that in formal education, there are internal and external factors, like curriculum content, school

context, teacher and learner background, cultural and societal preference, parent qualifications and views as well as social economic variables that have directly or indirectly effect on learners' learning performance.

Silas (2023) mentioned that learners whose parents participated in school activities had relatively higher learning performance compared to those whose parents were less attentive to home-based tasks of their children. On the other hand, Nzeyimana and Ndiokubwayo (2019) highlighted the teachers' role and learners' responsibilities in the teaching and learning process and the quality of learning outcomes. In these lines, Costa, et al. (2015) affirmed that effective classroom interactions enhance good performance and enhance positive impact on academic achievements. Therefore, Achor, et al. (2019) testified that the ways interactions between teachers and learners or among peers are conducted, determine how good or bad learners' learning performance is. In fact, not only do learners gain the importance of quality teacher-learners' classroom interactions, but also, because of those interactions, teachers may ameliorate their knowledge and way of teaching (teacher self-efficacy) to improve learners' learning performance (Velthuis, 2014). Then, when the teacher-learners' classroom interactions are well done, they orient teachers in their activities and also guide and lead learners toward positive achievements.

Balogun, et al (2020) highlighted the level of knowledge and skills in MoI among the components of performance levels for a learner. In addition, Owu-Ewie and Eshun (2015) testify that high learning performance may not take place when learners and teachers are uncomfortable or face limitations in MoI use. Within these situations, learners manifest unwillingness to listen, speak, or operate any other given task as they can't fully understand what is required to be done and the way to tackle it. In these regards, the situation in Rwanda is a good example, because, despite efforts made during more than two decades by the Rwandan Government and its stakeholders in education to enhance formal or informal acquisition of the English language used as MoI, till these days, English language is still hardly used in Rwandans' communications including classroom interactions (Sibomana, 2014). For this reason, Ndimurugero (2015) affirmed that barriers related to the MoI (English language) are among the key challenges met by non-English speaking background learners in Rwanda.

The 2008 shift from the use of Kinyarwanda and or French to English as the only MoI in Rwanda, targeted to help teachers and learners to acquire more and sufficient vocabulary that guarantees good communication skills through English for better integration in English-speaking communities (Schmitt, N. & Schmitt, D., 2014). Moreover,

Mwiseneza (2015) revealed that in Rwanda, low proficiency in English for teachers and or learners, handicaps: discussions, debate, way of asking and answering questions, and limits the ability to ask for or provide clarifications, either for teachers or for learners, which negatively affect the learning performance. Meanwhile, it was expected that good teacher-learners or peer communication and collaboration lead to good learners' learning performance in or outside the classroom tasks, as well as in national or international competitions (Zhou & Zhang, 2014). Therefore, 15 years after the shift from Kinyarwanda or French to English MoI, can be estimated as the due time to check if the above-mentioned expectations of reaching high learners' performance have been realized.

This study followed performance theory. Elger (2007, p 11) asserted that to perform is to take a complex series of actions that integrate skills and knowledge to produce a valuable result'. For this reason, to enhance good learners' learning performance, variables related to learners have to be accompanied by well-settled conducive learning environments by teachers and school managers (Johnson, 2017). Therefore, among six components (fixed factors, personal factors, context of performance, level of knowledge, level of skills, and level of identity) that determine the level of performance, four underpinned this study:

The measurement of the influence of strategies employed in teacher-learners 'classroom interactions through English on learners' learning performance needs to consider variables related to the situation in which teacher- learners' classroom interactions are carried out (*context*). In this context, it is necessary to analyze the influence of classroom interactions through English (the foreign language within an endoglossic country, where Kinyarwanda, the mother tongue is mostly used) on learners' learning performance. Then, the importance of strategies employed to enable teacher-learners' interactions had to be considered (Costa, et al., 2015). Additionally, variables related to learning experience including the level of information acquired (*level of knowledge*) as well as competencies (*skills*) in the MoI of learners in the lower primary may influence teacher-learners' classroom interactions and ad-hoc outcomes. Thereafter, all those analyses have to be done based on school location and school status (*the uniqueness or identity of the school*). Other components like personal and fixed factors were not considered during this study.

III. METHODOLOGY

Research design

This study followed the pragmatic philosophical way of thinking that uses both qualitative and quantitative approaches. The sequential exploratory research design was employed. Qualitative data were collected and analyzed, and the results led the researcher to collect additional quantitative data, to be able to compare the influence of strategies employed during teacher-learners' classroom interactions through English on learners' learning performance at different categories of schools.

Research area and research population

This study was conducted in lower levels of primary schools in Musanze District. The research population was 56,691 persons, including 56,125 learners, 449 teachers in lower primary as well as 117 head teachers.

Sampling techniques

Sampling techniques and sample size for qualitative data collection

To select and determine the sample schools for qualitative data collection, a stratified sampling technique was used. Six, within 117 primary schools in Musanze district, were purposively selected, based on their location and status. Then based on their location two categories of schools (rural and urban) were formed. In addition, regarding school status, three categories of schools (public, government aided and private schools) were made. To determine the representative sample schools, both categories of schools were merged, and six sample schools were randomly selected as follows: Gashangiro II (urban public school), GS Muhoza (urban government aided school), 'Ecole Regina Pacis' (urban private school), GS Murora (rural public school), GS Kamisave (rural government aided school) and SPES NOVA Junior Academy(rural private school).

To determine the school subject to consider, the purposive technique was employed. The condition was the subject taught and learnt through English. Therefore, among four core subjects taught in English [Social and Religious Studies, Mathematics, Science and Elementary Technology (SET) and English] SET subjects have been chosen randomly to be focused on, in this study. Therefore, 18 respondents in the proportion of three persons per school (12 teachers and 6 school head teachers) were selected randomly as research participants during the collection of qualitative data.

Sampling techniques and sample size for quantitative data collection

To get the sample size of research participants to provide quantitative data, 117 primary schools in Musanze district

were also split into two strata referring to their location (rural and urban schools) and three strata (public, government aided and private schools) based on their status. To determine the size of research participants, Yamane's formula (Chaokramthong & Sintao, 2021) was used as follows:

$n = \frac{N}{1+N(e)^2}$. Then, **N** represented population size, **n**: sample size, **e**: level of precision of 5/100. Therefore, $n=117/1+ [117*(0.05)^2]$. Then, $n=90.52224371$. Therefore, the sample size (n) was 91 schools. From these 91 sampled schools, in each stratum, a number of sample schools was determined using the method of proportional allocation under which, size of samples in different strata were remained proportional to the size of those strata (Kothari, 2004). Then, $n_i=n*P_i/N$. Where: n_i represented sample schools in each stratum, **n** represented all sample schools, **P_i** represented the proportion of schools included in stratum i, while **N** represented all schools in Musanze District.

The computation of sample schools in each stratum of schools has been made as the following:

Schools location

$-n_i \text{ rural schools}=n* P_i/N$. Then, $n_i \text{ rural schools}=91*80/117=62.22$

$n_i \text{ rural schools}=62 \text{ schools}$

$-n_i \text{ urban schools}=n* P_i/N$. Then, $n_i \text{ urban schools}=91*37/117=28.77$

$n_i \text{ urban schools}=29 \text{ schools}$

School Status

$-n_i \text{ Public schools}=n* P_i/N$. Then, $n_i \text{ rural schools}=91*28/117=21.77$

$n_i \text{ Public schools}=22 \text{ schools}$

$-n_i \text{ Government aided schools}=n* P_i/N$. Then, $n_i \text{ rural schools}=91*60/117=46.66$

$n_i \text{ Public Aided schools}=47 \text{ schools}$

$-n_i \text{ Private schools}=n* P_i/N$. Then, $n_i \text{ rural schools}=91*29/117=22.55$

$n_i \text{ Private schools}=22 \text{ schools}$

Therefore, the combination of sample schools was summarized in table 1.

Table 1: Sample schools

Name of Sector	Number of Sampled schools	Location		Status		
		Rural	Urban	Government Aided	Public	Private
Busogo	6	4	2	2	2	2
Cyuve	12	6	6	3	3	6
Gacaca	6	5	1	4	1	1
Gashaki	4	4	0	3	1	0
Gataraga	6	6	0	2	4	0
Kimonyi	3	2	1	1	1	1
Kinigi	6	5	1	2	2	2
Muhoza	16	1	15	6	2	8
Muko	4	4	0	3	1	0
Musanze	8	5	3	5	1	2
Nkotsi	5	5	0	4	1	0
Nyange	4	4	0	4	0	0
Remera	3	3	0	2	1	0
Rwaza	5	5	0	4	1	0
Shingiro	3	3	0	2	1	0
Total sample schools	91	62	29	47	22	22

Source: Secondary data, 2024

From Table 1, it is shown that the sample size of this research was made of 91 schools: 62 schools located in rural areas and 29 urban schools. Referring to school status, 47 sample schools were government-aided, 22 public and 22 private schools.

Research instruments

Qualitative and quantitative data were collected separately. Qualitative data were gathered by semi-structured interviews with twelve (12) SET teachers and six (6) school head teachers. Participants were required to provide their views on the influence of strategies employed in teacher-learners 'classroom interactions through English on learners' learning performance. For Quantitative data, a written questionnaire was administered to ninety-one (91) SET teachers. The information used within this study was obtained from 84 questionnaires returned.

Trustworthiness of data

To ensure the truthfulness and dependability of collected data, sessions of semi-structured interviews were carried out at sampled schools twice: during the first and second terms of the academic year 2023-2024, specifically in December 2023 and March 2024. The second sessions were organized to complete and confirm data obtained from the first sessions. Teachers were asked the same questions in semi-structured interviews to check the consistency of the information provided. The questionnaire was set based on the research question of the study and validated by the authors of this paper before and after the pilot study. Data from it were trustworthy with Pearson product-moment correlation. Therefore, the questionnaire was found reliable, as reliability (r) was found good ($r \geq .84$). To ensure the credibility of the findings, during data analysis, information from the questionnaire was triangulated with information gained from semi-structured interviews for the confirmability of data.

Ethical considerations

When administering research instruments, the ethics for researching human beings were respected. All research participants were informed of the purpose of the study, the researcher's expectations of their contributions to the good accomplishment of the study, and guaranteed the confidentiality of the information provided. Therefore, before conducting semi-structured interviews, the due time was fixed by teachers and head teachers to provide them ample time to get ready for interview sessions. Participation in this study was voluntary and inclusive and research participants signed the consent form. To comply with anonymity, the information from semi-structured interviews was coded and the questionnaire was filled without mentioning the name of the respondent.

Data analysis

Collected data were analyzed and interpreted separately. Thematic analysis technique was used to analyze qualitative data, while quantitative data were analyzed using inferential statistics using Statistical Package for Social Sciences (SPSS). The T-test was used to compare learners' learning performance regarding schools' location while Analysis of Variance (one-way-ANOVA) was used to determine the variability of learners 'learning performance depending on school status. The test of the level of significance was done based on 0.05 level. Findings were discussed and presented in the form of text, figures, and tables.

IV. RESULTS

Findings from this study showed that the influence of strategies employed during teacher-learners 'classroom interactions on learners' learning performance may be positive or negative depending on how the utilized strategies contribute to the acquisition of high or low levels of proficiency in English for both teachers and learners, regarding school status and school location.

The extent to which strategies employed in teacher-learners 'classroom interactions through English influence learners 'learning performance.

Influence of strategies related to levels of MoI and learners 'learning performance

The four (4) interviewed teachers and two (2) head teachers in rural and urban public and government-aided schools classified challenges related to barriers in MoI among the first causes of poor learning performance of learners in lower primary. Limitations in MoI impose them to utilize some strategies to enable them to communicate but sometimes do not guarantee high learners 'learning performance. One teacher mentioned the following:

'In fact, learners in the lower primary are incapable of communication in English through listening and speaking and by reading and writing. They cannot therefore perform well in examinations prepared in English only. After detecting those challenges related to language skills that can inevitably cause poor performance of learners, we have decided to mix English and Kinyarwanda while teaching, to help learners to understand taught content and interpret or translated exams questions from English to Kinyarwanda. Nevertheless, learners are required to answer in English during examinations'.

Interviewed teachers in urban government schools provided quite the same responses. They revealed that the most common challenges of learners leading to their failure in examinations are misunderstanding or wrong interpretation of asked questions because of the language barrier. One teacher in an urban government-aided school argued:

'As the good comprehension of the question and self-representation of the task required to be done, is the half of its response', the misunderstanding or wrong interpretation of the questions in exams are the prior failures of our learners during examination prepared in English'.

She witnessed that most of the time learners crammed and memorized some passages, phenomena, or formulas and failed to realize where to reproduce them during examination. She declared:

'Our learners become confused and struggle in searching where located or mentioned the memorized words or sentences in the asked questions, and then reproduce all memorized elements without separating required and non-required elements' and thus examination score reduced.

One of four (4) interviewed Head teachers in a public school reinforced the teachers' statements. He revealed that the low level of proficiency in English for teachers and learners could not allow them to interact through English only during the whole 40-minute lesson period. Then, most of the time they use Kinyarwanda while interacting so that learners cannot succeed in exercises, quizzes, or examinations prepared in English only without additional explanations or interpretation in Kinyarwanda. He remarked:

'The code-switching techniques are used in the classroom when teaching and learning, and during examinations to help learners to understand taught and learned lesson' content or to comprehend questions during classroom exercises, quiz, and tests. Otherwise, learners could get little or can do almost nothing in examinations. Consequently, challenges in MoI are one of the key causes of poor performance of our learners, especially in exams from the District and National Examination and School Inspection Authority (NESA). Many of our learners cannot 'do anything if no one translates

in Kinyarwanda the asked questions or tasks through English'.

Other teacher-learners' classroom interactions' strategies influencing learners' learning performance

On the other hand, in private schools, different information was provided. Four (4) interviewed teachers told us that the teaching and learning process is conducted in English only unless during French and Kinyarwanda subjects. One interviewed teacher in rural private school argued that strategies like concretization, group discussions, and debates, try out various exercises through English helping learners to master the English language, and well understand lesson contents. Thus learners' learning performances during school, district, and NESA examinations are at a high level. She added:

'Most of the time we are obliged to provide two types of examinations: (school examination and District or NESA's examination) because, most of the time, District or NESA's examinations were at a low level compared to the level of our pupils'.

Concerning the way of evaluating outcomes of the teaching-learning process, two head teachers mentioned that a few cases of learners' poor performance were not related to proficiency in MoI. They revealed other causes like the Intellectual Quotient (IQ) of the learners, the influence of peer groups' behaviors, learners' distraction inside or outside the classrooms, etc. Therefore, regarding the learners' performance in examinations, they noted that they prepared tough exercises and tests to help learners work hard and be competitive in inter-school or national examinations. One among them noted that they proceed as such, for early and progressive preparation of their learners for the national examination at the end of the cycle (P6). He said:

'The mission here is the hard working in teaching and learning process to reach the school to 100% success in national examinations.'

Comparative analysis of learners' learning performance among schools

Diagram 1 and 2 as well as Tables 2, 3 show the variability of learners' learning performance depending on school status and school locations.

Learners' learning performance based on school status

Findings from the comparisons of percentage of class averages during SET examination set at school and district levels were presented by figures 1 and 2.

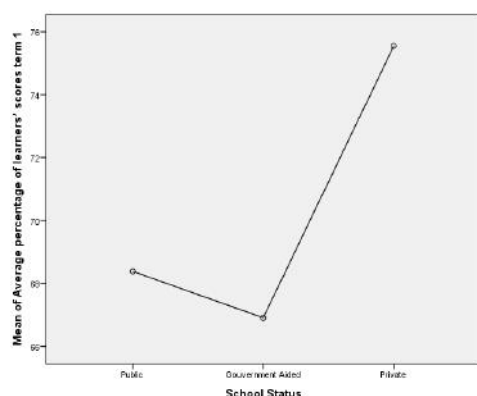


Fig.1: Mean Plots of learners' learning performance in Term1

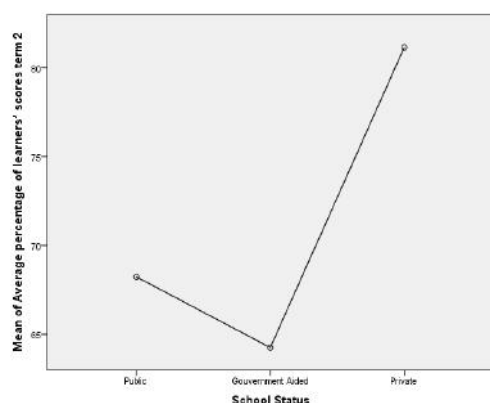


Fig.2: Mean Plots of learners' learning performance in Term2

Source: Primary data,2024

The figures 1 and 2 show high difference between the average of learners' scores in private, public and government aided schools. In fact, statistical results showed that during school examination (term 1); in public schools, $M=68.38$; $SD=8.925$; in government aided schools, $M=66.91$; $SD=11.854$; private schools, $M=75.55$; $SD=11.825$. Then, a statistically significant difference was detected between private, public and government schools, as $F(83)=4.284$; $p=.042<.05$. For District Examination (term 2); in public schools $M=68.24$; $SD=13.244$; government aided schools $M=64.26$; $SD=15.821$; private schools, $M=81.15$; $SD=7.666$. Again, a statistically significant difference was detected between private, public and government schools as $F(83)=12.234$; $p=.001<.05$.

Learners' learning performance based on school locations

Results from the comparison of percentage of class averages during SET examination prepared at school were visualised in table 2.

Table 2: Average percentages of learners' scores (term 1)

School Location		N	Mean	Std. Deviation	Std. Error Mean
Class average of learners' scores term 1	Rural	55	67.22	11.157	1.504
	Urban	29	73.34	11.592	2.153

Source: Primary data, 2024

From table 2 it is noticeable that in rural schools, the $M=67.22$; $SD=11,157$ while in urban schools the $M=73.34$; $SD=11.59$.

For the second term, results from the comparison of percentages of class averages or learners percentage during SET examination prepared at District level were presented in table 3.

Table 3: Class average percentage of learners' scores term 2

School Location		N	Mean	Std. Deviation	Std. Error Mean
Class average of learners' scores term 2	Rural	55	66.40	14.631	1.973
	Urban	29	74.72	14.866	2.761

Source: Primary Data, 2024

The table 3 shows that in rural schools, $M=66.40\%$; $SD=14.63$. For urban schools, $M=74.40$; $SD=14.72$.

For both tables (2 and 3) it is shown that the mean averages of learners' scores in rural schools were at lower level compared to those in urban schools. Therefore, a statistically significant difference was found between learners' learning performance in rural and urban schools, as during school examinations (in term 1) $t(82) = -2.361$; $p=.021<.05$, while during district Examinations (term2), $t(82) = -2.466$; $p=.016<.05$.

V. DISCUSSIONS

Results from this study revealed that strategies employed during teacher-learners' classroom interactions through

English influence learners' learning performance in different ways, depending on school status and school location. Results revealed that barriers in English (the MoI) dictate teachers and learners to adopt strategies like code-switching by translation and rote memorization or cramming that handicap a full understanding of learnt content and questions of examination for learners in public and government-aided schools. Therefore, learners' learning performance in those schools was found lower compared to that of their counterparts in private schools who are more proficient in the English language, and employed strategies leading to a better understanding of learnt content. The low learning performance detected in public and government-aided schools could be related to Iwasaki, et al. (2019) mentioning that only 38% of teachers in the lower primary in Rwanda met the requirements for teaching subjects in English. This implies that the teachers' low proficiency in MoI mostly has negative influences on teacher-learners' classroom interactions and learners' learning outcomes. This is because, as mentioned Gichuru and Ongus (2016), the teacher's background is likely to be the key influence on learners' learning performance. On the other side, the cramming strategy adopted by many learners in public and government-aided schools do not guarantee critical thinking and long-term memory mostly utilized during examinations.

Inversely, at private schools, learners have no problem with lessons taught and learnt through English and examinations prepared in English. In this concern, District and NESA examinations were qualifying to be at a low level compared to the level reached by learners in private schools. Consequently, most of the time those schools prepare additional examinations to be able to evaluate the level reached by their learners. In fact, to measure the outcomes of their work, before the end of the school year, the directors of studies are required to prepare additional examinations to that from NESA. Then, the comparative analysis of results from both examinations helps private schools to detect learners' learning performance at school and the national level, vis-a-vis the followed curriculum. In addition, these analyses help in measurement of schools' achievement regarding their missions and objectives, but also enlightens school staffs in decision making for way forward.

The significant difference between learners' learning performance found between rural and urban schools could be attributed to the fact that private schools are more concentrated in urban areas and teachers and learners in those schools are more proficient in English than those in public and government-aided schools. Therefore, the learners' learning performance of learners in schools of

rural areas was found low compared to that in urban schools.

Empirically, findings from this study could have some implications on the Rwandan education sectors as it informed how strategies adopted depending on the level of proficiency in MoI, influence teacher-learners' classroom interactions and learners' learning performance. Specifically, the fact that some learners are incapable of applying memorized elements during examinations because of the language barrier resulted in poor learning performance that can demotivate both teachers and learners during the teaching-learning process. Therefore, there is a need to search for suitable practices for both teachers and learners to enhance learners' understanding of subject content and tasks to be done, and thus, improve learning performance.

Limitations of the study

Normally, the analysis, measurement and evaluation as well as the judgement on learners' learning performance might require consideration, the comparison, the association and the contrast of various factors. Yet, this study only emphasized the influence of some pedagogical strategies employed during teacher-learners' classroom interactions through English on learners' learning performance. Therefore, to get a detailed picture of factors influencing learners' learning performance in the lower primary in Rwanda, additional studies specifically related to the influences of teaching-learning aids and peer learning would be necessary.

VI. CONCLUSION

The study intended to examine the influence of strategies employed during teacher-learners' classroom interactions through English on learners' learning performance in lower primary grades. Findings showed that the language barrier handicaps effective teacher-learners' classroom interactions. Then, some strategies utilized by many teachers and learners specifically in public and government-aided schools to enable teacher-learners' interactions lead to misunderstanding of subjects' content taught in English. In addition, the wrong interpretation or misunderstanding of required tasks during examination was mentioned as a prior cause of lower learning performance of many learners from those schools during examinations set in English. Moreover, in private schools, there was no problem related to proficiency in English used as MoI, and learners' learning performance was at a high level compared to that in public and government-aided schools. Moreover, other factors like learners' distractions and negative peer group behavior were mentioned to have negative influences on some learners' learning performance in private schools. The study

recommended: (1) Teachers and learners to strive to improve their level of English proficiency and adopt strategies that can be more helpful to mitigate the problem of the language barrier, the main cause of poor learning performance in public and government-aided schools. (2) NESA have to increase school inspections to get the reality that could help to provide effective advice and prepare standardized examinations based on the balance between required and gained knowledge and skills for better learners' learning performance at lower primary school.

REFERENCES

- [1] Achor, E. E., Danjuma, I. M., & Orji, A. (2019). Classroom interaction practices and students' learning outcomes in physics: Implication for teaching-skill development for physics teachers. *Journal of Education and e-Learning Research*, 6(3), 96-106.
- [2] Al Husaini, Y. N. S., & Shukor, N. S. A. (2022). Factors Affecting Students' Academic Performance: A review. *resmilitaris*, 12(6), 284-294.
- [3] Assan, J. K., & Walker, L. (2018). Enhancing Citizens Capability to Compete Globally: Rwanda's Formal Language and Education Policy and Its Implications for Labour Market Development. *Journal of Education and Human Development*, 7(1), 1-6.
- [4] Ayuwanti, I., & Siswoyo, D. (2021). Teacher-student interaction in mathematics learning. *International Journal of Evaluation and Research in Education*, 10(2), 660-667.
- [5] BAGAMBE, P. M., Kiiza, A. K., & Mugabe, R. (2015). *English Language Proficiency and Students' Performance in Secondary Schools in Rwanda: A Case Study of Bugesera District* (Doctoral dissertation, Uganda Management Institute).
- [6] Balogun, O. S., Olaleye, S. A., & Ibidoja, O. J. (2020). University student's academic performance: an approach of Tau statistic. *Proceedings of the 36th International Business Information Management Association (IBIMA), Granada, Spain, 4-5 November 2020*.
- [7] Bascopé, M., Perasso, P., & Reiss, K. (2019). Systematic review of education for sustainable development at an early stage: Cornerstones and pedagogical approaches for teacher professional development. *Sustainability*, 11(3), 719.
- [8] Chaokromthong, K., & Sintao, N. (2021). Sample size estimation using Yamane and Cochran and Krejcie and Morgan and green formulas and Cohen statistical power analysis by G* Power and comparisons. *Apheit International Journal*, 10(2), 76-86.
- [9] Costa, C., Cardoso, A. P., Lima, M. P., Ferreira, M., & Abrantes, J. L. (2015). Pedagogical interaction and learning performance as determinants of academic achievement. *Procedia-Social and Behavioral Sciences*, 171, 874-881.
- [10] Dash, B. B., & Gandhi, M. K. (2022). Significance of Globalisation and English Language. *International Journal on Studies in English Language and Literature (IJSELL)*, 10(5), 10-16.
- [11] Demetriou, A., Kazi, S., Spanoudis, G., & Makris, N. (2019). Predicting school performance from cognitive ability, self-representation, and personality from primary school to senior high school. *Intelligence*, 76, 101381.
- [12] Dong, M. (2020). Structural relationship between learners' perceptions of a test, learning practices, and learning outcomes: A study on the washback mechanism of a high-stakes test. *Studies in Educational Evaluation*, 64, 100824.
- [13] Dushimumuremyi, D., & Sibomana, E. (2018). Competence-Based English Language Teaching in Rwanda: Opportunities, Challenges and possible solutions. *Journal of Language, Technology & Entrepreneurship in Africa*, 9(2), 1-15.
- [14] Elger, D. (2007). Theory of performance. *Faculty guidebook: A comprehensive tool for improving faculty performance*, 4, 19-22.
- [15] Emmanuel, H., Oyeibimpe, A., & Andala, H. O. (2020). English Language Skills and Students' Academic Performance in Rwandan Public Secondary Schools: Case of Bugesera District.
- [16] Gichuru, L. M., & Ongus, R. W. (2016). Effect of teacher quality on student performance in mathematics in Primary 6 National Examination: A survey of private primary schools in Gasabo District, Kigali City, Rwanda. *International Journal of Education and Research*, 4(2), 237-259.
- [17] Izci, K. (2016). Internal and External Factors Affecting Teachers' Adoption of Formative Assessment to Support Learning. *International Journal of Social, Behavioural, Educational, Economic, Business and Industrial Engineering*, 10(8), 2541-2548.
- [18] Johnson, D. (2017). The Role of Teachers in Motivating Students to Learn. *BU Journal of Graduate studies in education*, 9(1), 46-49.
- [19] Karasenga, J., & Nzanana, J. B. (2022). Quality Education and the Use of English Language as a Medium of Instruction in Rwandan Schools: An Interpretivist Study. *International Journal of Educational Review*, 4(1), 1-12.
- [20] Kistner, S., Rakoczy, K., Otto, B., Klieme, E., & Büttner, G. (2015). Teaching learning strategies. The role of instructional context and teacher beliefs. *Journal for educational research online*, 7(1), 176-197.
- [21] Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.
- [22] Kwibuka, E. (2013). Speaking English becomes cool. *Global: The International Briefing*.
- [23] Lamas, H. A. (2015). School Performance. *Journal of Educational Psychology-Propositons y Representaciones*, 3(1), 351-385.
- [24] Musengimana, J., Kampire, E., & Ntawiha, P. (2021). Investigation of most commonly used instructional methods in teaching Chemistry: Rwandan lower secondary schools. *International Journal of Learning, Teaching and Educational Research*, 20(7), 241-261.
- [25] Mwiseneza, T. (2015). English as Medium of Instruction and Academic Performance of Pupils in Primary Schools in Gakenke District, Rwanda.
- [26] Ndabaga, E., Kwok, P. K. P., Sabates, R., Ntabajyana, S., & Bizimana, B. (2023). Transitioning to an unfamiliar medium

- of instruction: strategies used by Rwandan primary school teachers to enable learning. *International Journal of Educational Research*, 120, 102206.
- [27] Ndimurugero, S. N. (2015). Learning English for academic purposes in higher education in Rwanda: a case study of a College of Business and Economics.
- [28] NDIZEYE, A. (2022). *Students and lecturers' attitudes towards English medium of instruction in engineering courses at Rwanda polytechnic* (Doctoral dissertation, University of Rwanda (College of Education)).
- [29] Ndizeye, A., & Tabaro, C. (2023). Attitudes towards English Medium of Instruction in Engineering Courses in Rwanda Polytechnic. *Journal of Research in Higher Education*, 7(1).
- [30] Niyibizi, E. (2014). *Foundation phase learners' and teachers' attitudes and experiences with the Rwandan language-in-education policy shifts* (Doctoral dissertation, University of the Witwatersrand, Faculty of Humanities, and School of Education).
- [31] Nshimiyimana, E., & Bazimaziki, G. (2024). Effectiveness of audio-lingual teaching method to enhance students' English speaking and listening proficiency: The case of selected primary schools in Nyagatare District. *Rwandan Journal of Education*, 7(2), 32-41.
- [32] Ntawihwa, P., Otieno, M. A., Nzababirwa, W., Benegusenga, A., & Ahimana, E. (2020). Determinants of Students' Performance in Selected Public Secondary Schools in Rwanda. *Rwandan Journal of Education*, 5(1).
- [33] Nzeyimana, J. C., & Ndiokubwayo, K. (2019). Teachers' role and learners' responsibility in teaching and learning science and elementary technology in Rwanda. *African Journal of Educational Studies in Mathematics and Sciences*, 15(2), 1-16.
- [34] Okechukwu, J. N., & Oboshi, B. C. (2021). Influence of Overcrowded Classroom on Pupils' Academic Achievement in Public Primary Schools in Idemili South Local Government Area of Anambra State, Nigeria. *Journal of Educational Research & Development*, 4(2).
- [35] Owu-Ewie, C., & Eshun, E. S. (2015). The Use of English as Medium of Instruction at the Upper Basic Level (Primary Four to Junior High School) in Ghana: From Theory to Practice. *Journal of Education and Practice*, 6(3), 72-82.
- [36] Pals, F. F., Tolboom, J. L., Suhre, C. J., & van Geert, P. L. (2018). Memorization methods in science education: tactics to improve the teaching and learning practice. *International Journal of Science Education*, 40(2), 227-241.
- [37] Pearson, P. (2014). Policy without a plan: English as a medium of instruction in Rwanda. *Current issues in language planning*, 15(1), 39-56.
- [38] Pritchett, L. (2015). Creating education systems coherent for learning outcomes: Making the transition from schooling to learning. *Research on Improving Systems of Education (RISE)*.
- [39] Reddy, M. S., Mahavidyalaya, P., & Hyderabad, K. (2016). Importance of English Language in today's World. *International Journal of Academic Research*, 3(4), 179-184.
- [40] Rizinde, T., NKIKABAHIZI, F., Babamwana, L., & Umutesi, J. (2018). Achieving the Sustainable Development Goals in Rwanda: The Role of Administrative Data Inclusion. *East Africa Research Papers in Economics and Finance*.
- [41] Saeed, N., & Mohamedali, F. (2022). A study to evaluate students' performance, engagement, and progression in higher education based on feedforward teaching approach. *Education Sciences*, 12(1), 56.
- [42] Schmitt, N., & Schmitt, D. (2014). A reassessment of frequency and vocabulary size in L2 vocabulary teaching. *Language Teaching*, 47(4), 484-503.
- [43] Shahjahan, M., Ahmed, K. R., Al Hadrami, A., Islam, M. R., Hossain, S., & Khan, M. S. (2021). Factors influencing poor academic performance among urban university students in Bangladesh. *International Journal of Evaluation and Research in Education*, 10(4), 1140-1148.
- [44] Shamil, Y. A., Rawdhan, A., & Hassan, H. (2022). Investigating the Effect of Classroom Discourse Interaction on Improving Iraqi EFL 5th Preparatory School Students' Performance in English Conversation. *resmilitaris*, 12(2), 5328-5343.
- [45] Sibomana, E. (2014). The acquisition of English as a second language in Rwanda: challenges and promises. *Rwandan Journal of Education*, 2(2), 19-30.
- [46] Silas, B. (2023). Effect of Parental Engagement on Students Performance in Bugesera District, Rwanda. *International Journal of Research and Innovation in Social Science*, 7(8), 1878-1894.
- [47] Velthuis, C., Fisser, P., & Pieters, J. (2014). Teacher training and pre-service primary teachers' self-efficacy for science teaching. *Journal of science teacher education*, 25(4), 445-464.
- [48] Zahedpisheh, N., Abu Bakar, Z. B., & Saffari, N. (2017). English for Tourism and Hospitality Purposes (ETP). *English Language Teaching*, 10(9), 86-94.
- [49] Zhou, G., & Zhang, Z. (2014). A study of the first year international students at a Canadian university: Challenges and experiences with social integration. *Comparative and International Education*, 43(2).